

April 29, 1992

Reply To Attn Of: HW-113

Dean Fowler, Project Manager Utility Division Spokane County Public Works N. 811 Jefferson Street Spokane, Washington 99260-0180

Re: Phase II Preliminary Extraction Well Plan, Comments

Dear Mr. Fowler:

The U.S. Environmental Protection Agency (EPA) and the Washington Department of Ecology (Ecology) have reviewed the "Preliminary Extraction Well Plan, Phase II Remedial Design/Remedial Action, Colbert Landfill, Spokane, Washington," dated March 10, 1992. The review has not raised any issues or problems which are inconsistent with the National Contingency Plan (NCP), Scope of Work (SOW), or Consent Decree. However, a number of comments are enclosed for your consideration in the final document.

A letter with the Ecology comments is enclosed. Some additional comments on the hydraulic modeling follow.

The use of MODFLOW for modeling the existing conditions appears to follow accepted practices. The limitations of the modeling effort were well examined. In some areas, more detailed discussions would be appropriate. Some specific comments on this plan are provided:

For modeling considerations, the ranges used in the hydraulic conductivity sensitivity analyses appear to be restricted to the high and low observed field values. A larger interval may be more appropriate to account for unexpected highs or lows.

In the model, the eastern boundary for the upper aquifer cuts through the edge of the landfill. Little quantitative information is known about the eastern boundary and the supposition is that the upper and lower aquifers directly interface in this area as the lacustrine unit pinches out. Therefore, a more fully developed discussion of the modeling assumptions would be appropriate.

Did the hardware and grid considerations necessitate two separate models for the upper and lower aquifers? A single multi-aquifer model may be more appropriate.



The use of VCONT implies a model with two or more layers, yet the gridding and discussion clearly show two models, one for the upper aquifer and one for the lower aquifer. What is the purpose of VCONT?

If you have any questions regarding these comments, please do not hesitate contacting Mike Kuntz, Ecology Project Manager, at (206) 438-3070 or me at (206) 553-7177.

Sincerely,

Neil E. Thompson Project Manager

Enclosure

cc: Kuntz, Ecology Mackey, ORC



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

April 24, 1992

Mr. Neil Thompson EPA - Region 10 1200 Sixth Avenue Seattle, WA 98101

RE: Colbert Landfill - Ecology Review of Preliminary Extraction Well Plan Phase II Remedial Design/Remedial Action

Dear Mr. Thompson:

Ecology has reviewed the plan and has enclosed comments to be forwarded to Spokane County. Specific comments follow:

In the third paragraph of page 2-4, two extraction wells are deleted, but the specific reasons for delation are not given. Only a general reference is made to "hydrogeologic conditions identified in Phase I." The reader is not even referred to a report for the reasons.

The reasons for deleting two extraction wells should be clearly stated in the extraction well report, and support for the reasons should be identified or referenced.

- 2) The two deleted extraction wells mentioned in the third paragraph of page 2-4, are to be "retained for potential installation." As the wells are stipulated in the Consent Decree, Ecology and EPA will decide on when and where to install the wells. This should be made clear in the report.
- Administrative well installation procedures (i.e., well start cards) should be coordinated with the Eastern Regional Office of Ecology.
- 4) In the second paragraph of page 2-4, the "hydrogeological conditions" that necessitate two additional monitoring wells at monitoring location CD-44 should be identified.
- 5) In the first paragraph of page 2-5, the implication is made that any new monitoring wells outside the zone of capture are to be installed at the discretion of the County. Ecology and EPA's role in deciding the location of new monitoring wells should be made clear
- 6) As-built reports of all extraction wells including bore hole logs should be submitted to Ecology and the EPA.

Mr. Neil Thompson April 24, 1992 Page 2

If you have any questions concerning this letter, please do not hesitate to contact me at 438-3079.

Sincerely,

Michael Kuntz

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